

REMARKS

The Applicant has thoroughly reviewed the outstanding Office Action including the Examiner's remarks and the references cited therein. The Applicant amends claims as the Claim Amendments, and the following remarks are believed to be fully responsive to the Office Action and render all claims at issue patentable and distinguishable over the cited references.

Reconsideration and withdrawal of the rejections set forth in the Office Action dated March 29, 2007 are respectfully requested.

- A. Claim Rejections to Claims 1-6, 8, 10-15, 17-19, 21-26, 28 and 30-34 under 35 U.S.C. §103(a)

The Examiner rejected Claims 1-6, 8, 10-15, 17-19, 21-26, 28 and 30-34 of the present application under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Application No. 6,549,257 (hereinafter referred to as Liu) and U.S. Patent Application No. 6,724,452 (hereinafter referred to as Takeda). The applicant amends claim 1 to combine the limitations of claims 3 and 8, removes claims 12 and 19, and amends claim 25. Therefore, the applicant provides the following descriptions and requests respectfully the Examiner to withdraw the rejections.

The present invention discloses a liquid crystal display device that provides a multi-domain homeotropic alignment mode liquid crystal display device. The spacers therein can be replaced with the intersections of the bumps or the contact points formed on bumps and so the problems of spacers non-uniformly sprinkling or spacers gathering can be avoided. Further, the present invention mentions a liquid crystal display device to divide pixels into a plurality of domains with appropriate dimensions to maintain the characteristic of fast response for large-size liquid crystal displays or liquid crystal displays with larger pixels.

In order to achieve the above purpose, all the amended claims indicate that the said first substrate having a common electrode layer and said multi domain pattern composed of a frame pattern and a pixel-dividing pattern, and said second substrate having a matrix composed of a plurality of transistors. Under the scheme, the claimed invention may provide the liquid crystal display device with dual-substrate scheme having common electrode layer and a matrix composed of a plurality of transistors, respectively, to avoid the problems of spacers non-uniformly sprinkling or spacers gathering, thereby achieving the objects of the claimed invention.

Referring to the references cited by the examiner, Liu discloses a multi-domain wide viewing angle liquid crystal display (LCD) having a plurality of superimposed spacing wall-bump structures formed on a pair of parallel substrates. Further, Takeda discloses a strip patterns can be formed as a bump and or slit structure. Takeda mentions that bumps and slits can be interchangeably formed over the substrate since both bumps and slits have the same function of aligning liquid crystal molecules in each domain. The Examiner believes that the combination of the cited references render the applicant's invention obvious.

To sum up, the Examiner's rejection is based on that bumps and slits disclosed by the references are interchangeable in achieving the function of aligning liquid crystal molecules in each domain.

Referring to the page 10 line 36 and the descriptions below of present application, if the bumps are only formed on the substrate having the common electrode layer, the problem that bumps are hard to be formed on a substrate having a plurality of transistors is solved; therefore, the yield can be raised and the cost can be reduced. This technical feature shows that a bump and a slit are not interchangeable as set in the amended claims 1 and 25. Both claimed inventions indicate that the bumps are formed on the first substrate having a common electrode layer and said multi domain pattern, and transistors are formed on a second substrate with a plurality of strip patterns having slit structures. Hence the prior art, that is, bumps and slits are interchangeable discloses by the

references dissuade person having ordinary skill in the art (PHOSITA) from thinking of the technical feature, that is, bumps are only formed on the substrate having the common electrode layer, disclosed in the present application; i.e., the references cited by the examiner teach away the PHOSITA from combining the references to render this technical feature of the present application obvious. Therefore, the references teach away from the method and result mentioned by the present invention, and the present invention should be non-obvious.

As aforementioned, the cited references have no discussion regarding the feature that characterizes in the non-interchangeability mentioned by the present invention. Moreover, the cited references fail to disclose the liquid crystal display device with dual-substrate scheme respectively having common electrode layer and a matrix composed of a plurality of transistors to avoid the problems of spacers non-uniformly sprinkling or spacers gathering mentioned by the present invention. Quite a difference exists among them. Accordingly, the person having ordinary skilled in the art cannot anticipate the structure, method and result mentioned by the present invention in view of these references. Due to the distinct and irrelevant teaching provided by the cited references, there is no motivation to combine these references. Therefore, the present invention should be non-obvious.

Hence, referring to the amendments to the claims of the present communication, the claims 1 and 25 have been appropriately amended to render the present application unobviousness over the references cited by the examiner. Thus, the rejection of claim 1 under 35 U.S.C. §103(a) is overcome, for the same reason, so are the claims 2, 4-6, 10-11, 13-15, 17-18, 21-24 and 26, 28, 30-34.

Conclusion

In view of the foregoing, Claims 1, 2, 4-6, 10, 11, 13-15, 17, 18, 21-26, 28 and 30-34 pending in the application comply with the requirements of patentability define over the applied art. Reconsideration and withdrawal of the rejections set forth in the U.S. Office

Action are respectfully requested. A Notice of Allowance is, therefore, respectfully requested.

Applicant has included payment of \$1,810 to cover the fees for a Request for Continued Examination and extension of time. Should there exist a deficiency in fees due, please charge our Deposit Account No. 50-0665, under Order No. 386998051US from which the undersigned is authorized to draw.

Dated:

6/1/07

Respectfully submitted,

By


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